ACGME Program Requirements for Graduate Medical Education in Surgical Critical Care

One-year Common Program Requirements are in BOLD

Effective: July 1, 2012

Introduction

Int.A. **Residency and fellowship programs are essential dimensions of the transformation of the medical student to the independent practitioner along the continuum of medical education. They are physically, emotionally, and intellectually demanding, and require longitudinally-concentrated effort on the part of the resident or fellow.**

The specialty education of physicians to practice independently is experiential, and necessarily occurs within the context of the health care delivery system. Developing the skills, knowledge, and attitudes leading to proficiency in all the domains of clinical competency requires the resident and fellow physician to assume personal responsibility for the care of individual patients. For the resident and fellow, the essential learning activity is interaction with patients under the guidance and supervision of faculty members who give value, context, and meaning to those interactions. As residents and fellows gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept—graded and progressive responsibility—is one of the core tenets of American graduate medical education. Supervision in the setting of graduate medical education has the goals of assuring the provision of safe and effective care to the individual patient; assuring each resident's and fellow's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishing a foundation for continued professional growth.

Int.B. Definition and Scope of the Subspecialty

Int.B.1. Surgical critical care is a subspecialty of surgery that manages complex surgical and medical problems in critically-ill surgical patients. Graduate educational programs in surgical critical care provide the educational, clinical, and administrative resources to allow fellows to develop advanced proficiency in the management of critically-ill surgical patients, to develop the qualifications necessary to supervise surgical critical care units, and to conduct scholarly activities in surgical critical care. The educational programs enhance and are an integral part of an Accreditation Council for Graduate Medical Education (ACGME)-accredited core program in surgery.

Int.B.2. The goal of a surgical critical care fellowship program is to prepare the fellow to function as a qualified practitioner at the advanced level of performance expected of a Board-certified subspecialist. The education of surgeons in the practice of surgical critical care encompasses didactic

instruction in the basic and clinical sciences of surgical diseases and conditions, as well as education in procedural skills and techniques used in the intensive care settings. This educational process leads to the acquisition of an appropriate fund of knowledge and technical skills, the ability to integrate the acquired knowledge into the clinical situation, and the development of judgment.

Int.C. The educational program in surgical critical care must be 12 months in length.

I. Institutions

I.A. Sponsoring Institution

One sponsoring institution must assume ultimate responsibility for the program, as described in the Institutional Requirements, and this responsibility extends to fellow assignments at all participating sites.

The sponsoring institution and the program must ensure that the program director has sufficient protected time and financial support for his or her educational and administrative responsibilities to the program.

I.A.1. The sponsoring institution must provide the program director with a minimum of 10% protected time or direct salary support or indirect salary support, such as release from clinical activities.

I.A.2. The sponsoring institution must also sponsor an ACGME-accredited residency program in pediatric surgery, surgery, thoracic surgery, or vascular surgery.

I.A.2.a) There must be interaction between the core residency program in pediatric surgery, surgery, thoracic surgery, or vascular surgery and the fellowship program which results in coordination of educational, clinical, and investigative activities.

I.A.3. Any institution that sponsors more than one critical care program must coordinate interdisciplinary requirements to ensure that fellows meet the specific criteria of their primary specialties.

I.A.4. It is strongly suggested that the sponsoring institution also sponsor ACGME-accredited residency programs in those specialties that relate particularly to surgery, such as anesthesiology, diagnostic radiology, internal medicine, and pathology.

I.B. Participating Sites

I.B.1. There must be a program letter of agreement (PLA) between the program and each participating site providing a required assignment. The PLA must be renewed at least every five years.

The PLA should:

I.B.1.a) **identify the faculty who will assume both educational and supervisory responsibilities for fellows;**

I.B.1.b) **specify their responsibilities for teaching, supervision, and formal evaluation of fellows, as specified later in this document;**

I.B.1.c) **specify the duration and content of the educational experience; and,**

I.B.1.d) **state the policies and procedures that will govern fellow education during the assignment.**

I.B.2. **The program director must submit any additions or deletions of participating sites routinely providing an educational experience, required for all fellows, of one month full time equivalent (FTE) or more through the Accreditation Council for Graduate Medical Education (ACGME) Accreditation Data System (ADS).**

I.B.2.a) Clinical assignments to participating sites must be approved prior to fellows' rotating to the sites, and must not be more than three months in length.

II. Program Personnel and Resources

II.A. Program Director

II.A.1. **There must be a single program director with authority and accountability for the operation of the program. The sponsoring institution's GMEC must approve a change in program director. After approval, the program director must submit this change to the ACGME via the ADS.**

II.A.1.a) The length of the program director's appointment must be at least two years.

II.A.2. **Qualifications of the program director must include:**

II.A.2.a) **requisite specialty expertise and documented educational and administrative experience acceptable to the Review Committee;**

II.A.2.b) **current certification in the subspecialty by the American Board of** Surgery **or subspecialty qualifications that are acceptable to the Review Committee; and,**

II.A.2.c) **current medical licensure and appropriate medical staff appointment.**

II.A.2.c).(1) This must include unrestricted credentials at the primary

clinical site, and

II.A.2.c).(2) The program director should possess licensure to practice medicine in the state where the primary clinical site is located.

II.A.2.d) faculty appointment in good standing at the primary clinical site.

II.A.3. The program director must administer and maintain an educational environment conducive to educating the fellows in each of the ACGME competency areas. The program director must:

II.A.3.a) prepare and submit all information required and requested by the ACGME;

II.A.3.b) be familiar with and oversee compliance with ACGME and Review Committee policies and procedures as outlined in the ACGME Manual of Policies and Procedures;

II.A.3.c) obtain review and approval of the sponsoring institution's GMEC/DIO before submitting to the ACGME information or requests for the following:

II.A.3.c).(1) all applications for ACGME accreditation of new programs;

II.A.3.c).(2) changes in fellow complement;

II.A.3.c).(3) major changes in program structure or length of training;

II.A.3.c).(4) progress reports requested by the Review Committee;

II.A.3.c).(5) responses to all proposed adverse actions;

II.A.3.c).(6) requests for increases or any change to fellow duty hours;

II.A.3.c).(7) voluntary withdrawals of ACGME-accredited programs;

II.A.3.c).(8) requests for appeal of an adverse action; and,

II.A.3.c).(9) appeal presentations to a Board of Appeal or the ACGME.

II.A.3.d) obtain DIO review and co-signature on all program information forms, as well as any correspondence or document submitted to the ACGME that addresses:

II.A.3.d).(1) program citations, and/or

II.A.3.d).(2) **request for changes in the program that would have significant impact, including financial, on the program or institution.**

II.A.3.e) maintain a collegial relationship with faculty members to enhance the educational opportunities for all fellows; and,

II.A.3.f) direct or co-direct one or more of the critical care units in which the clinical aspects of the educational program take place, and personally supervise and teach surgery and surgical critical care fellows in that unit.

II.B. Faculty

II.B.1. **There must be a sufficient number of faculty with documented qualifications to instruct and supervise all fellows.**

II.B.1.a) In addition to the program director, at least one surgeon certified in surgical critical care must be appointed to the faculty for every critical care fellow enrolled in the program.

II.B.2. **The faculty must devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities and demonstrate a strong interest in the education of fellows.**

II.B.3. **The physician faculty must have current certification in the sub specialty by the American Board of** Surgery**, or possess qualifications acceptable to the Review Committee.**

II.B.4. **The physician faculty must possess current medical licensure and appropriate medical staff appointment.**

II.B.5. Non-surgical physician faculty members must be certified in critical care in their specialty area or possess alternative qualifications judged to be acceptable by the Review Committee.

II.B.6. Faculty members must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences.

II.B.7. Faculty members must establish and maintain an environment of inquiry and scholarship with an active research component.

II.B.7.a) The program director and some members of the faculty should also demonstrate scholarship by one or more of the following:

II.B.7.a).(1) peer-reviewed funding;

II.B.7.a).(2) publication of original research or review articles in peer-reviewed journals, or chapters in textbooks;

II.B.7.a).(3) publication or presentation of case reports or clinical series at local, regional, or national professional and scientific society meetings; or,

II.B.7.a).(4) participation in national committees or educational organizations.

II.C. Other Program Personnel

The institution and the program must jointly ensure the availability of all necessary professional, technical, and clerical personnel for the effective administration of the program.

II.C.1. Staff members must include specially-trained nurses and technicians skilled in critical care instrumentation, respiratory function, and laboratory medicine.

II.D. Resources

The institution and the program must jointly ensure the availability of adequate resources for fellow education, as defined in the specialty program requirements.

II.D.1. Resources should include a simulation and skills laboratory.

II.D.2. Resources must include:

II.D.2.a) a critical care unit located in a designated area within the institution, constructed and designed specifically for the care of critically-ill patients;

II.D.2.b) a common office space for fellows that includes a sufficient number of computers and adequate workspace at the primary clinical site;

II.D.2.c) online radiographic and laboratory systems at the primary clinical site and participating sites;

II.D.2.d) software resources for production of presentations, manuscripts, and portfolios;

II.D.2.e) an average daily census of at least 10 patients in each intensive care unit to which a fellow is assigned; and,

II.D.2.f) an average daily census for each critical care unit to which fellows are assigned that ensures a fellow-to-patient ratio of 1:10.

II.D.3. The education must take place in care settings for critically-ill adult and/or pediatric surgical patients.

II.E. Medical Information Access

Fellows must have ready access to specialty-specific and other appropriate reference material in print or electronic format. Electronic medical literature databases with search capabilities should be available.

II.E.1. Fellows must have Internet access to full-text journals and electronic medical reference resources for education and patient care at all participating sites.

III. Fellow Appointments

III.A. Eligibility Criteria

Each fellow must successfully complete an ACGME-accredited specialty program and/or meet other eligibility criteria as specified by the Review Committee. The program must document that each fellow has met the eligibility criteria.

III.A.1. Prior to appointment in the program, fellows must have completed at least three clinical years in an ACGME-accredited graduate educational program in one of the following specialties: anesthesiology, emergency medicine, neurological surgery, obstetrics and gynecology, orthopaedic surgery, otolaryngology, surgery, thoracic surgery, vascular surgery, or urology.

III.A.1.a) Fellows, who have completed an emergency medicine residency, must also complete one preliminary year of education in the surgery program at the institution where they will enroll in the surgical critical care fellowship. At a minimum the prelimary year of education must include supervised clinical experience in:

III.A.1.a).(1) pre-operative evaluation, including respiratory, cardiovascular, and nutritional evaluation;

III.A.1.a).(2) pre-operative and post-operative care of surgical patients, including outpatient follow-up care;

III.A.1.a).(3) care of injured patients;

III.A.1.a).(4) care of patients requiring abdominal, breast, head and neck, endocrine, thoracic, and vascular operations;

III.A.1.a).(5) management of complex wounds; and,

III.A.1.a).(6) minor operative procedures related to critical care, such as venous access, tube thoracostomy, and tracheostomy.

III.B. Number of Fellows

The program director may not appoint more fellows than approved by the Review Committee, unless otherwise stated in the specialty-specific

requirements. The program's educational resources must be adequate to support the number of fellows appointed to the program.

III.C. The presence of other learners, including residents from other specialties, subspecialty fellows, PhD students, and nurse practitioners, in the program must not interfere with the appointed fellows' education. The program director must report the presence of other learners to the DIO and GMEC in accordance with sponsoring institution guidelines.

IV. Educational Program

IV.A. The curriculum must contain the following educational components:

IV.A.1. Skills and competencies the fellow will be able to demonstrate at the conclusion of the program. The program must distribute these skills and competencies to fellows and faculty annually, in either written or electronic form. These skills and competencies should be reviewed by the fellow at the start of each rotation;

IV.A.2. ACGME Competencies

The program must integrate the following ACGME competencies into the curriculum:

IV.A.2.a) Patient Care

Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows:

IV.A.2.a).(1) must have supervised training that will enable them to demonstrate competence in the following critical care skills:

IV.A.2.a).(1).(a) circulatory: performance of invasive and noninvasive monitoring techniques, and the use of vasoactive agents and management of hypotension and shock; application of trans-esophageal and transthoracic cardiac ultrasound and transvenous pacemakers, dysrhythmia diagnosis and treatment, and the management of cardiac assist devices;

IV.A.2.a).(1).(b) endocrine: performance of the diagnosis and management of acute endocrine disorders, including those of the pancreas, thyroid, adrenals, and pituitary;

IV.A.2.a).(1).(c) gastrointestinal: performance of utilization of gastrointestinal intubation and endoscopic techniques in the management of the critically-ill patient; and management of stomas, fistulas, and

percutaneous catheter devices;

IV.A.2.a).(1).(d) hematologic: performance of assessment of coagulation status, and appropriate use of component therapy;

IV.A.2.a).(1).(e) infectious disease: performance of classification of infections and application of isolation techniques, pharmacokinetics, drug interactions, and management of antibiotic therapy during organ failure; nosocomial infections; and management of sepsis and septic shock;

IV.A.2.a).(1).(f) monitoring/bioengineering: performance of the use and calibration of transducers and other medical devices;

IV.A.2.a).(1).(g) neurological: performance of management of intracranial pressure and acute neurologic emergencies, including application of the use of intracranial pressure monitoring techniques and electroencephalography to evaluate cerebral function;

IV.A.2.a).(1).(h) nutritional: performance of the use of parenteral and enteral nutrition, and monitoring and assessing metabolism and nutrition;

IV.A.2.a).(1).(i) renal: performance of the evaluation of renal function; use of renal replacement therapies; management of hemodialysis, and management of electrolyte disorders and acid-base disturbances; and application of knowledge of the indications for and complications of hemodialysis; and,

IV.A.2.a).(1).(j) respiratory: performance of airway management, including techniques of intubation, endoscopy, and tracheostomy, as well as ventilator management.

IV.A.2.a).(2) must demonstrate competence in the application of the following critical care skills:

IV.A.2.a).(2).(a) circulatory: transvenous pacemakers; dysrhythmia diagnosis and treatment, and the management of cardiac assist devices; and use of vasoactive agents and the management of hypotension and shock;

IV.A.2.a).(2).(b) neurological: the use of intracranial pressure monitoring techniques and electroencephalography to evaluate cerebral function;

IV.A.2.a).(2).(c) renal: knowledge of the indications for and complications of hemodialysis, and management of electrolyte disorders and acid-base disturbances; and,

IV.A.2.a).(2).(d) miscellaneous: performance of the use of special beds for specific injuries, and employment of skeletal traction and fixation devices.

IV.A.2.b) Medical Knowledge

Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. Fellows:

IV.A.2.b).(1) must demonstrate advanced knowledge of the following aspects of critical care, particularly as they relate to the management of patients with homodynamic instability, multiple system organ failure, and complex coexisting medical problems:

IV.A.2.b).(1).(a) biostatistics and experimental design;

IV.A.2.b).(1).(b) cardiorespiratory resuscitation;

IV.A.2.b).(1).(c) critical obstetric and gynecologic disorders;

IV.A.2.b).(1).(d) critical pediatric surgical conditions;

IV.A.2.b).(1).(e) ethical and legal aspects of surgical critical care;

IV.A.2.b).(1).(f) hematologic and coagulation disorders;

IV.A.2.b).(1).(g) inhalation and immersion injuries;

IV.A.2.b).(1).(h) metabolic, nutritional, and endocrine effects of critical illness;

IV.A.2.b).(1).(i) monitoring and medical instrumentation;

IV.A.2.b).(1).(j) pharmacokinetics and dynamics of drug metabolism and excretion in critical illness;

IV.A.2.b).(1).(k) physiology, pathophysiology, diagnosis, and therapy of disorders of the cardiovascular, respiratory, gastrointestinal, genitourinary, neurological, endocrine, musculoskeletal, and immune systems, as well as of infectious diseases;

IV.A.2.b).(1).(l) principles and techniques of administration and management; and,

IV.A.2.b).(1).(m) trauma, thermal, electrical, and radiation injuries.

IV.A.2.c) Practice-based Learning and Improvement

Fellows are expected to develop skills and habits to be able to meet the following goals:

IV.A.2.c).(1) systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;

IV.A.2.c).(2) locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.

IV.A.2.d) Interpersonal and Communication Skills

Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

IV.A.2.d).(1) Fellows must demonstrate effective skills in teaching the specialty of surgical critical care.

IV.A.2.e) Professionalism

Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

IV.A.2.f) Systems-based Practice

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

IV.A.2.f).(1) Fellows must be able to administer a surgical critical care unit and appoint, educate, and supervise specialized personnel; establish policy and procedures for the unit; and coordinate the activities of the unit with other administrative units within the hospital.

IV.A.3. Curriculum Organization and Fellow Experiences

IV.A.3.a) All 12 months must be devoted to advanced educational and clinical activities related to the care of critically-ill patients and to

the administration of critical care units.

IV.A.3.a).(1) At least eight months must be in a surgical intensive care unit.

IV.A.3.a).(1).(a) At least five of the eight months should be in a unit in which a surgeon is director or co-director.

IV.A.3.a).(1).(b) The surgical intensive care unit must be largely dedicated to the care of one or more of the following surgical patients: adult surgical, burn, cardiothoracic, neurosurgical, pediatric surgical, transplant, and trauma.

IV.A.3.a).(2) No more than two months should be in non-surgical intensive care units, such as medical, cardiac, or pediatric units.

IV.A.3.a).(3) No more than two months should be in elective rotations in areas relevant to critical care, such as trauma or acute care surgery.

IV.A.3.a).(3).(a) Elective clinical rotations done outside of the critical care unit should involve the care of patients with acute surgical diseases such as those related to injury or emergent surgical conditions.

IV.A.3.b) The core curriculum must include a regularly-scheduled didactic program based on the core knowledge content and areas defined as a fellow's outcomes in the specialty.

IV.A.3.c) Participation in direct operative care of critically-ill patients in the operating room during critical care rotations should not be so great as to interfere with the primary educational purpose of the critical care rotation.

IV.A.3.d) Fellows must keep two written records of their experience: a summary record documenting the numbers and types of critical care patients; and an operative log of numbers and types of operative experiences, including bedside procedures.

IV.A.3.e) A chief resident in surgery and a fellow in surgical critical care must not have primary responsibility for the same patient.

IV.B. Fellows' Scholarly Activities

V. Evaluation

V.A. Fellow Evaluation

V.A.1. Formative Evaluation

V.A.1.a) **The faculty must evaluate fellow performance in a timely manner.**

V.A.1.b) **The program must:**

V.A.1.b).(1) **provide objective assessments of competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice;**

V.A.1.b).(2) **use multiple evaluators (e.g., faculty, peers, patients, self, and other professional staff); and,**

V.A.1.b).(3) **provide each fellow with documented semiannual evaluation of performance with feedback.**

V.A.1.c) **The evaluations of fellow performance must be accessible for review by the fellow, in accordance with institutional policy.**

V.A.1.d) Semiannual assessment must include a review of case volume, breadth, and complexity, and must ensure that fellows are maintaining the required written records.

V.A.2. **Summative Evaluation**

The program director must provide a summative evaluation for each fellow upon completion of the program. This evaluation must become part of the fellow's permanent record maintained by the institution, and must be accessible for review by the fellow in accordance with institutional policy. This evaluation must:

V.A.2.a) **document the fellow's performance during their education, and**

V.A.2.b) **verify that the fellow has demonstrated sufficient competence to enter practice without direct supervision.**

V.B. **Faculty Evaluation**

V.B.1. **At least annually, the program must evaluate faculty performance as it relates to the educational program.**

V.B.2. **These evaluations should include a review of the faculty's clinical teaching abilities, commitment to the educational program, clinical knowledge, professionalism, and scholarly activities.**

V.C. **Program Evaluation and Improvement**

V.C.1. **The program must document formal, systematic evaluation of the**

curriculum at least annually. The program must monitor and track each of the following areas:

V.C.1.a) **fellow performance, and**

V.C.1.b) **faculty development.**

V.C.2. **If deficiencies are found, the program should prepare a written plan of action to document initiatives to improve performance in the areas listed in section V.C.1. The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes.**

V.C.3. 65% of a program's graduates from the preceding five years taking the American Board of Surgery certifying examination for surgical critical care for the first time must pass.

VI. Fellow Duty Hours in the Learning and Working Environment

VI.A. Professionalism, Personal Responsibility, and Patient Safety

VI.A.1. **Programs and sponsoring institutions must educate fellows and faculty members concerning the professional responsibilities of physicians to appear for duty appropriately rested and fit to provide the services required by their patients.**

VI.A.2. **The program must be committed to and responsible for promoting patient safety and fellow well-being in a supportive educational environment.**

VI.A.3. **The program director must ensure that fellows are integrated and actively participate in interdisciplinary clinical quality improvement and patient safety programs.**

VI.A.4. **The learning objectives of the program must:**

VI.A.4.a) **be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; and,**

VI.A.4.b) **not be compromised by excessive reliance on fellows to fulfill non-physician service obligations.**

VI.A.5. **The program director and sponsoring institution must ensure a culture of professionalism that supports patient safety and personal responsibility. Fellows and faculty members must demonstrate an understanding and acceptance of their personal role in the following:**

VI.A.5.a) **assurance of the safety and welfare of patients entrusted to their care;**

VI.A.5.b) provision of patient- and family-centered care;

VI.A.5.c) assurance of their fitness for duty;

VI.A.5.d) management of their time before, during, and after clinical assignments;

VI.A.5.e) recognition of impairment, including illness and fatigue, in themselves and in their peers;

VI.A.5.f) attention to lifelong learning;

VI.A.5.g) the monitoring of their patient care performance improvement indicators; and,

VI.A.5.h) honest and accurate reporting of duty hours, patient outcomes, and clinical experience data.

VI.A.6. All fellows and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. Physicians must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient's care to another qualified and rested provider.

VI.B. Transitions of Care

VI.B.1. Programs must design clinical assignments to minimize the number of transitions in patient care.

VI.B.2. Sponsoring institutions and programs must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety.

VI.B.3. Programs must ensure that fellows are competent in communicating with team members in the hand-over process.

VI.B.4. The sponsoring institution must ensure the availability of schedules that inform all members of the health care team of attending physicians and fellows currently responsible for each patient's care.

VI.C. Alertness Management/Fatigue Mitigation

VI.C.1. The program must:

VI.C.1.a) educate all faculty members and fellows to recognize the signs of fatigue and sleep deprivation;

VI.C.1.b) educate all faculty members and fellows in alertness management and fatigue mitigation processes; and,

VI.C.1.c) **adopt fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning, such as naps or back-up call schedules.**

VI.C.2. **Each program must have a process to ensure continuity of patient care in the event that a fellow may be unable to perform his/her patient care duties.**

VI.C.3. **The sponsoring institution must provide adequate sleep facilities and/or safe transportation options for fellows who may be too fatigued to safely return home.**

VI.D. Supervision of Fellows

VI.D.1. **In the clinical learning environment, each patient must have an identifiable, appropriately-credentialed and privileged attending physician (or licensed independent practitioner as approved by each Review Committee) who is ultimately responsible for that patient's care.**

VI.D.1.a) **This information should be available to fellows, faculty members, and patients.**

VI.D.1.b) **Fellows and faculty members should inform patients of their respective roles in each patient's care.**

VI.D.2. **The program must demonstrate that the appropriate level of supervision is in place for all fellows who care for patients.**

Supervision may be exercised through a variety of methods. Some activities require the physical presence of the supervising faculty member. For many aspects of patient care, the supervising physician may be a more advanced fellow. Other portions of care provided by the fellow can be adequately supervised by the immediate availability of the supervising faculty member or fellow physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post-hoc review of fellow-delivered care with feedback as to the appropriateness of that care.

VI.D.3. **Levels of Supervision**

To ensure oversight of fellow supervision and graded authority and responsibility, the program must use the following classification of supervision:

VI.D.3.a) **Direct Supervision – the supervising physician is physically present with the fellow and patient.**

VI.D.3.b) **Indirect Supervision:**

VI.D.3.b).(1) with direct supervision immediately available – the supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide Direct Supervision.

VI.D.3.b).(2) with direct supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision.

VI.D.3.c) Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

VI.D.4. The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each fellow must be assigned by the program director and faculty members.

VI.D.4.a) The program director must evaluate each fellow's abilities based on specific criteria. When available, evaluation should be guided by specific national standards-based criteria.

VI.D.4.b) Faculty members functioning as supervising physicians should delegate portions of care to fellows, based on the needs of the patient and the skills of the fellows.

VI.D.4.c) Fellows should serve in a supervisory role of residents or junior fellows in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual fellow.

VI.D.5. Programs must set guidelines for circumstances and events in which fellows must communicate with appropriate supervising faculty members, such as the transfer of a patient to an intensive care unit, or end-of-life decisions.

VI.D.5.a) Each fellow must know the limits of his/her scope of authority, and the circumstances under which he/she is permitted to act with conditional independence.

VI.D.6. Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each fellow and delegate to him/her the appropriate level of patient care authority and responsibility.

VI.E. Clinical Responsibilities

The clinical responsibilities for each fellow must be based on PGY-level,

patient safety, fellow education, severity and complexity of patient illness/condition and available support services.

VI.E.1. The workload associated with optimal clinical care of surgical patients is a continuum from the moment of admission to the point of discharge.

VI.E.2. During the residency education process, surgical teams should be made up of attending surgeons, residents at various PG levels, medical students (when appropriate), and other health care providers.

VI.E.3. The work of the caregiver team should be assigned to team members based on each member's level of education, experience, and competence.

VI.E.4. As fellows progress through levels of increasing competence and responsibility, it is expected that work assignments will keep pace with their advancement.

VI.F. Teamwork

Fellows must care for patients in an environment that maximizes effective communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty.

VI.F.1. Effective surgical practices entail the involvement of members with a mix of complementary skills and attributes (physicians, nurses, and other staff). Success requires both an unwavering mutual respect for those skills and contributions, and a shared commitment to the process of patient care.

VI.F.2. Fellows must collaborate with fellow surgical residents, and especially with faculty, other physicians outside of their specialty, and non-traditional health care providers, to best formulate treatment plans for an increasingly diverse patient population.

VI.F.3. Fellows must assume personal responsibility to complete all tasks to which they are assigned (or which they voluntarily assume) in a timely fashion. These tasks must be completed in the hours assigned, or, if that is not possible, fellows must learn and utilize the established methods for handing off remaining tasks to another member of the fellow team so that patient care is not compromised.

VI.F.4. Lines of authority should be defined by programs, and all fellows must have a working knowledge of these expected reporting relationships to maximize quality care and patient safety.

VI.G. Fellow Duty Hours

VI.G.1. Maximum Hours of Work per Week

Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities and all moonlighting.

VI.G.1.a) **Duty Hour Exceptions**

A Review Committee may grant exceptions for up to 10% or a maximum of 88 hours to individual programs based on a sound educational rationale.

The Review Committee for General Surgery will not consider requests for exceptions to the 80-hour limit to the fellows' work week.

VI.G.1.a).(1) **In preparing a request for an exception the program director must follow the duty hour exception policy from the ACGME Manual on Policies and Procedures.**

VI.G.1.a).(2) **Prior to submitting the request to the Review Committee, the program director must obtain approval of the institution's GMEC and DIO.**

VI.G.2. **Moonlighting**

VI.G.2.a) **Moonlighting must not interfere with the ability of the fellow to achieve the goals and objectives of the educational program.**

VI.G.2.b) **Time spent by fellows in Internal and External Moonlighting (as defined in the ACGME Glossary of Terms) must be counted towards the 80-hour Maximum Weekly Hour Limit.**

VI.G.3. **Mandatory Time Free of Duty**

Fellows must be scheduled for a minimum of one day free of duty every week (when averaged over four weeks). At-home call cannot be assigned on these free days.

VI.G.4. **Maximum Duty Period Length**

Duty periods of fellows may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Programs must encourage fellows to use alertness management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 p.m. and 8:00 a.m., is strongly suggested.

VI.G.4.a) **It is essential for patient safety and fellow education that effective transitions in care occur. Fellows may be allowed to remain on-site in order to accomplish these tasks; however, this period of time must be no longer than an additional four**

hours.

VI.G.4.b) **Fellows must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.**

VI.G.4.c) **In unusual circumstances, fellows, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family.**

VI.G.4.c).(1) **Under those circumstances, the fellow must:**

VI.G.4.c).(1).(a) **appropriately hand over the care of all other patients to the team responsible for their continuing care; and,**

VI.G.4.c).(1).(b) **document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director.**

VI.G.4.c).(2) **The program director must review each submission of additional service, and track both individual fellow and program-wide episodes of additional duty.**

VI.G.5. **Minimum Time Off between Scheduled Duty Periods**

VI.G.5.a) **Fellows must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.**

Surgical critical care fellows are considered to be in the final years of education.

VI.G.5.a).(1) **This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day-off-in-seven standards. While it is desirable that fellows have eight hours free of duty between scheduled duty periods, there may be circumstances when these fellows must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty.**

VI.G.5.a).(1).(a) **Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by fellows must be monitored by the program director.**

VI.G.5.a).(1).(b) The Review Committee defines such circumstances as: required continuity of care for a severely ill or unstable patient, or a complex patient with whom the fellow has been involved; events of exceptional educational value; or, humanistic attention to the needs of a patient or family.

VI.G.6. Maximum Frequency of In-House Night Float

Fellows must not be scheduled for more than six consecutive nights of night float.

VI.G.6.a) Any rotation that requires fellows to work nights in succession is considered a night float rotation, and the total time on nights is counted toward the maximum allowable time for each fellow.

VI.G.6.b) Night float rotations must not exceed two months in succession, or three months in succession for rotations with night shifts alternating with day shifts.

VI.G.6.c) There can be no more than four months of night float per year.

VI.G.6.d) There must be at least two months between each night float rotation.

VI.G.7. Maximum In-House On-Call Frequency

Fellows must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).

VI.G.8. At-Home Call

VI.G.8.a) Time spent in the hospital by fellows on at-home call must count towards the 80-hour maximum weekly hour limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks.

VI.G.8.a).(1) At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each fellow.

VI.G.8.b) Fellows are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new "off-duty period".

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